Kit’s Clever Computing Cards: Mastering Programming

Learning objective: I can explain how to write and debug simple computer programs.

About 15 minutes. Grown-up tip: Ask your child to explain their day at school using a step-by-step 'sequence' algorithm.

Read the front of each card. Can you explain the answer before flipping it over to check? If you are stuck, think about how Kit the Fox solves puzzles step-by-step! Example: Front: What is an algorithm? Back: A precise list of instructions to complete a task.

What is an algorithm?	A step-by-step set of instructions to solve a problem.
What do we call a mistake in a computer program?	A bug.
What is the process of finding and fixing a mistake?	Debugging.
What is a 'sequence' in programming?	The correct order in which instructions must happen.
What is a loop?	A way to repeat an action multiple times automatically.
What is an 'input'?	Information given to a computer, like pressing a key.
What is a variable?	A place in a program to store information that might change.
True or False: A computer program can understand vague instructions like 'make it look nice'.	False. Computers need precise, logical instructions.
Why is the order of instructions important?	If the sequence is wrong, the program will not work correctly.
What is an 'output'?	The result the computer shows after following the instructions.